

The 3 I's - Our Vision for Our Subject

Intent:

At Athersley South Primary we recognise the important role maths plays in all our lives, from using our counting skills when visiting the supermarket to measuring ingredients for a cake. We strive to provide a high-quality mathematics education within a mastery approach which develops a solid understanding of mathematical concepts and equips children with the skills for later life.

The National Curriculum for mathematics intends to ensure that all pupils:

- Become fluent in the fundamentals of mathematics.
- Reason mathematically.
- Can solve problems by applying their mathematics.

It is this intent that underpins all we do at Athersley South.

Implementation:

At Athersley South Primary School, we aim for children to achieve within lessons by utilising a range of fluency, reasoning and problem solving style questions in a practical and engaging manner. We are well on our way along the *Teaching for Mastery* journey and use the unit planning and progression maps provided by White Rose Maths to ensure whole school coverage. These allow the teachers to ensure children are building on small steps between lessons and spend enough time exploring a unit in a logical and sequenced order.

At Athersley South, we do not set for maths lessons apart from in EYFS and Y6. Y6 are taught across two sets in order to provide a bespoke curriculum for these children.

As part of everyday teaching, staff employ a variety of methods to ensure children have the necessary tools to fully grasp concepts:

- Manipulatives (practical maths) and visual aids including the use of ICT;
- We integrate fluency, problem solving and reasoning opportunities within a lesson in order to create learners who have the skills needed to attempt more challenging mathematical problems;
- In order to build stamina and accuracy with arithmetic skills, each class has a weekly focus on arithmetic skills and complete an arithmetic style test bi-weekly;
- In KS2, children complete a daily Morning Maths session which focusses on fluency and arithmetic skills. This encompasses all four basic operations and is targeted to the needs of the children as identified from summative and formative assessments.

In order to ensure progress can be tracked, there are 6 whole school assessment points where the children take either a Rising Stars or PUMA assessment. Data from these is analysed and feed into the rigorous pupil progress process ensuring all children are making progress. Teaching is monitored by the subject leader through lesson observations and book scrutinies.

Children in KS2 also take home a homework book which is differentiated for their ability level. The questions are broad and varied and allow children to see things presented in different ways and to consolidate their maths skills at home.

EYFS

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS Profile document. Mathematics development involves providing children with opportunities to practice and improve their skills in counting numbers, calculating simple addition and subtraction problems and to describe shapes, space and measures. The numbers 1 to 5 are introduced separately over the course of 2 weeks and explored in depth. Children make links between these numbers, develop a greater number sense, and explore concepts to do with the target number such as one more than and one less than and halving and doubling. Links are made between the target number and the properties of shapes, such as 3 sides of a triangle when 3 was introduced.

Impact:

Our teachers are always encouraged to use their professional judgement, meaning that children are given enough time to learn and practise each area of maths before moving on. This means that children can develop a deeper understanding of concepts. Our maths books show a range of activities, with evidence of fluency, reasoning and problem solving. Children are developing their reasoning skills and are beginning to be able to articulate these verbally, pictorially and in written form.

Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we can maintain high standards, with achievement at the end of KS2 above the national average. Progress is monitored closely every term during pupil progress and the

During pupil voice interviews, the children were very positive about the way maths was taught in school saying “it’s fun because we learn lots of different things and play games to help us learn”. The children have said that the homework books are “cool” and “help you learn more”. They liked the fact that they “get new questions that have not been taught” and like how the teachers discuss the solutions to any errors or misconceptions in class.